

AMENDMENT TRANSMITTAL LETTER (Large Entity)

Applicant(s): Richard D. Breault and Patrick L. Hagans

Docket No.

C-3053

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/656,529	9/5/2003	Carol Chaney		1745	

Invention P Method of Operating a Fuel Cell System Under Freezing Conditions

MAR 25 2005

COMMISSIONER FOR PATENTS:

Transmitted herewith is an amendment in the above-identified application.

The fee has been calculated and is transmitted as shown below.

CLAIMS AS AMENDED

	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST # PREV. PAID FOR	NUMBER EXTRA CLAIMS PRESENT	RATE	ADDITIONAL FEE
TOTAL CLAIMS	9 -	20 =	0	x \$50.00	\$0.00
INDEP. CLAIMS	2 -	3 =	0	x \$200.00	\$0.00
Multiple Dependent Claims (check if applicable)	<input type="checkbox"/>				\$0.00
	TOTAL ADDITIONAL FEE FOR THIS AMENDMENT				\$0.00

- No additional fee is required for amendment.
- Please charge Deposit Account No. _____ in the amount of _____.
- A check in the amount of _____ to cover the filing fee is enclosed.
- The Director is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account **50-1307**
 - Any additional filing fees required under 37 C.F.R. 1.16.
 - Any patent application processing fees under 37 CFR 1.17.
- Payment by credit card. Form PTO-2038.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.



Harry S. Truman

Signature

Dated: March 23, 2005

**Stephen E. Revis
Registration #26,609**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on

March 23, 2005

(Date)



James C. Gaskins

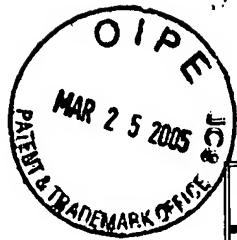
Signature of Person Mailing Correspondence

Stephen E. Revis

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cc:

IFW



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of Richard D. Breault and
Patrick L. Hagans

Docket No.: C-3053

Examiner: Carol Chaney

Serial No.: 10/656,529

Group Art Unit: 1745

Filed: September 5, 2003

Title: Method of Operating a Fuel Cell System Under Freezing Conditions

1
2 Commissioner for Patents
3 P. O. Box 1450
4 Alexandria, VA 22313-1450

5
6 Sir:

7 **AMENDMENT**
8

9 In response to the Office Action dated January 7, 2005, please amend the
10 above-identified application as follows:

11

12 **IN THE CLAIMS:**

13 Cancel claims 1-21.

14 Add the following new claims:

15 22. A method for operating a fuel cell system, the system including a stack of
16 PEM fuel cells including at least one cooler for carrying antifreeze through the
17 stack to remove heat, the fuel cell system further including a water circulation
18 system for accumulating water and circulating that water through water flow
19 passages passing through each cell, wherein, at the time of start-up, the stack
20 has frozen water therein and there is insufficient liquid water within the water
21 circulation system to enable the circulation of water, the method for operating
22 the fuel cell system including (a) starting up and operating the frozen stack by
23 introducing non-humidified reactants into the cells and connecting a load
24 across the stack to generate heat to increase the stack temperature to above 0°C
25 and thereby melt frozen water within the stack, including accumulating liquid
26 water during stack operation until there is sufficient liquid water to enable
27 circulation of liquid water through the cell water flow passages, and thereafter